

WHAT IS CLAIMED IS:

1. A positioning device comprising:

a knob (20) having a receiving tube (21) extending from a first side thereof
and a positioning tube (22) extending from the first side of the knob (20) and
5 enclosed by the receiving tube (21), the positioning tube (22) having a first engaging
portion (23) in an inner periphery thereof;

10 a connection member (30) having a first end (33) received in the receiving
tube (21) and a passage (31) defined in the connection member (30), a spring (40)
received in the passage (31) and a first end of the spring (40) being stopped by a first
flange (32) extending from an inner periphery in the passage (31), and

15 a rod (50) having a second engaging portion (51) defined in an outer
periphery of a first end thereof and a stepped shoulder (52) defined in the outer
periphery of the rod (50), the spring (40) mounted to the rod (50) and a second end
of the spring (40) being engaged with the stepped shoulder (52), the rod (50) inserted
in the passage (31) of the receiving tube (21) and the first end of the rod (50) being
movably inserted in the positioning tube (22), the first engaging portion (23) being
engaged with the second engaging portion (51), a second end of the rod (50)
extending from a distal end of the connection member (30).

20 2. The device as claimed in claim 1, wherein the first engaging portion (23)
is a flange extending inward from the inner periphery of the positioning tube (22)
and the second engaging portion (51) is a groove defined in the outer periphery of
the rod (50).

3. The device as claimed in claim 1 further comprising at least one slit (220) defined longitudinally in the positioning tube (22) so that the positioning tube (22) is composed of at least two expandable pawls.

4. The device as claimed in claim 1, wherein the first engaging portion (23) 5 is a flange extending inward from the inner periphery of the positioning tube (22) and includes two opposite sides, one of the two opposite sides being a flat side that is perpendicular to the inner periphery of the positioning tube (22) and the other one of the two opposite sides being a curved side, the second engaging portion (51) being a groove that is shaped to compensate the first engaging portion (23).

10 5. The device as claimed in claim 1, wherein the first engaging portion (23) is a groove defined in the inner periphery of the positioning tube (22) and the second engaging portion (51) is a flange extending outward inward from the outer periphery of the rod (50).

6. The device as claimed in claim 1, wherein the first engaging portion (23) 15 is a flange extending inward from the inner periphery of the positioning tube (22) and the rod (50) includes a section that is sized to be inserted through a space enclosed by the flange of the first engaging portion (23) and the first end of the rod (50) is an enlarged head that is stopped by the first engaging portion (23).

7. The device as claimed in claim 1, wherein the connection member (30) 20 includes a section of threaded outer periphery (34).

8. The device as claimed in claim 1, wherein the receiving tube (22) has a polygonal inner periphery and the first end (33) of the connection member (30) has a

polygonal outer periphery which is engaged with the polygonal inner periphery of the receiving tube (22).